

AD-A119 044

ILLINOIS UNIV AT URBANA DEPT OF PSYCHOLOGY
ATTRIBUTIONS OF SUCCESS AND FAILURE AMONG HISPANIC AND MAINSTRE--ETC(U)
AUG 82 H C TRIANDIS, G MARIN, H BETANCOURT
N00014-80-C-0407

F76 5/11

UNCLASSIFIED

TR-ONR-21

NL

for
AD-A
19044

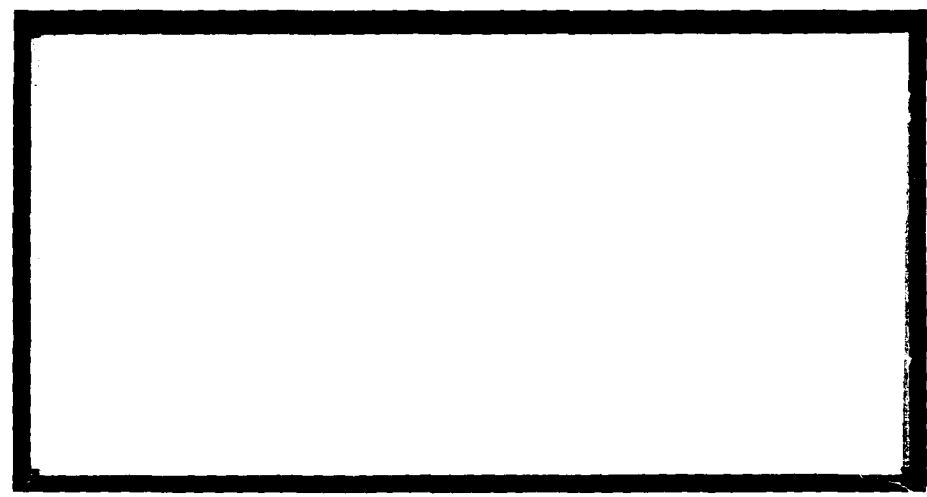
END
DATE
FILMED
10-82
DTIC

4

AD A119044

PERSONNEL TECHNOLOGY

**AN EXAMINATION OF HISPANIC AND GENERAL POPULATION
PERCEPTIONS OF ORGANIZATIONAL ENVIRONMENTS**
(Harry C. Triandis, Principal Investigator)



**DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF ILLINOIS
URBANA-CHAMPAIGN, ILLINOIS 61820**

Prepared with the support of:

The Organizational Effectiveness Research Programs of the Office of Naval Research
(Code 452) under Contract N 00014-80-C-0407; NR 170-906

DTIC FILE COPY

DTIC
ELECTE
S SEP 8 1982 **D**
D

Reproduction in whole or in part is permitted for any purpose of the United States Government. Approved for Public Release; Distribution unlimited

82 09 08 066

ATTRIBUTIONS OF SUCCESS AND FAILURE
AMONG HISPANIC AND MAINSTREAM NAVY RECRUITS

Technical Report ONR-21

August, 1982

Accession For	
NTIS GRA&I	<input checked="" type="checkbox"/>
DTIC TAB	<input type="checkbox"/>
Unannounced	<input type="checkbox"/>
Justification	
By	
Distribution/	
Availability Codes	
Dist	Avail and/or Special
A	



Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER ONR-21	2. GOVT ACCESSION NO. AD A229044	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) Attributions of Success and Failure among Hispanic and Mainstream Navy Recruits		5. TYPE OF REPORT & PERIOD COVERED Interim Technical Report
7. AUTHOR(s) Harry C. Triandis Hector Betancourt Gerardo Marín Yoshihisa Kashima		6. PERFORMING ORG. REPORT NUMBER
9. PERFORMING ORGANIZATION NAME AND ADDRESS Department of Psychology University of Illinois 603 E. Daniel, Champaign, IL 61820		8. CONTRACT OR GRANT NUMBER(s) N 00014-80-C-0407
11. CONTROLLING OFFICE NAME AND ADDRESS Organizational Effectiveness Research Group Office of Naval Research (Code 442) Arlington, VA 22217		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS NR 170-906
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		12. REPORT DATE August, 1982
		13. NUMBER OF PAGES 10
		15. SECURITY CLASS. (of this report) Unclassified
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) Approved for public release; distribution unlimited. Reproduction in whole or in part is permitted for any purpose of the U.S. Government.		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Hispanics, Attributions, Success, Failure		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) Forty-nine Mainstream and 41 Hispanic male Navy recruits responded to a questionnaire consisting of 16 items in which they were asked to make a judgment, on a 7 point scale (true--to--false), about the likelihood		

DD FORM 1 JAN 75 1473

EDITION OF 1 NOV 68 IS OBSOLETE
S/N 0102- LP-014-6601

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Unclassified

ONR-21

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

that particular causal explanations might be valid in the case of eight success and eight failure events. While the outcome (success-failure) produced large differences in the attributions there were no differences traceable to ethnicity. Both groups took much credit for success, i.e., showed a self-serving bias. These results are consistent with previous research in this project which found only minor differences between Hispanic and Mainstream Navy recruits.

S/N 0102- LF- 014- 6601

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

Attributions of Success and Failure among Hispanic

and Mainstream Navy Recruits

Harry C. Triandis,
University of Illinois,
Urbana-Champaign

Gerardo Marín, Hector Betancourt,
Spanish Speaking Mental Health Research Center
University of California, Los Angeles

and Yoshihisa Kashima
University of Illinois, Urbana-Champaign

Because of the fact that the range of possible explanations for why some event occurs is very large and may also vary from culture to culture (Triandis, 1972), researchers interested in the area consider causality attributions according to their underlying dimensions. Weiner and associates (e.g., Weiner & Kukla, 1970; Weiner, 1979) for example, have proposed three dimensions for attributions of causality for success or failure situations: (a) locus (causes may be internal or external to the person); (b) stability (causes may be enduring or changing), and (c) controllability (causes may or may not be subject to volitional control). These dimensional properties of causes have been found to be related to important psychological consequences as originally proposed by attribution theory. In this sense, locus is related to self esteem, stability is related to expectancies for future success, and controllability is relevant to feelings of satisfaction and evaluations by others.

A phenomenon that has received a great deal of attention in the study of attribution processes is the so-called self serving bias (see Miller & Ross, 1975). Although the controversial cognitive vs. motivational explanation of the phenomenon has stimulated considerable research (e.g., Bradley, 1978; Miller, 1978; Weary, 1979; Zuckerman, 1979), it seems that the controversy cannot be properly solved now (i.e., Tetlock & Levi, 1982). Despite this state of affairs, the fact that people tend to take more responsibility for favorable outcomes than for unfavorable ones, seems very well established at least in the United States. This is not the case in some

cross-cultural studies. For instance, Fry and Gosh (1980) report that Asian Indian children in Canada assumed more responsibility for failure than for success, whereas Caucasian Canadian children assumed more responsibility for success than for failure.

Experimental data on the self-serving bias phenomenon among Hispanics is lacking although some evidence would suggest lack of cultural differences, at least in terms of internal vs. external attributions (Hui, Triandis & Chang, Note 1).

The present study examined preferred attributions of causality for achievement related events among Hispanic and Mainstream young adult men. Similarities or differences in attributions made by both groups can be informative not only in terms of possible culture specific attributional differences but also in terms of the behavioral implications of the attributions for self esteem and expectancies for future success.

Method

Subjects

Forty-nine Mainstream and 41 Hispanic male Navy recruits responded to a questionnaire while being classified into Navy jobs, as part of a larger study of their perceptions of the social environment. In each of the three Navy recruit stations (Florida, California, and Illinois) when a Spanish-surname recruit was to be classified, the classification officer checked the recruit's self-identification on an application form on which "Hispanic" was one of the ways in which the applicant could describe himself. If the Spanish-surname recruit had selected the "Hispanic" self-identification label, he was asked to complete the questionnaire. At that time another recruit (with a non-Spanish surname) was randomly selected and given the same questionnaire. These other recruits are here referred to as "Mainstream" and will

include both whites and blacks as well as Hispanics who did not identify themselves as "Hispanic."

Instrument

A questionnaire consisting of 16 items was used in this study where the respondents were asked to judge on a seven-point scale (1, definitely true, 7 definitely false) how valid each type of causal explanation was for a success event (eight items) and a failure (eight items). Each set of eight items tapped the three dimensional classifications of causal explanations proposed by Weiner (1979) (internal vs. external; stable vs. unstable; controllable vs. uncontrollable). The specific attributions judged by the subjects included ability, task difficulty, immediate effort, typical efforts, mood, luck and usual or unusual help or neglect by others. For example, the item "I was in a very good mood while doing the task" referred to an internal, unstable and uncontrollable causal explanation.

Results

The responses provided by the subjects were grouped into indices of internality, stability and controllability by subtracting the sum of ratings for one type of explanations (e.g., externality) from the sum of ratings for the opposite attribution (e.g., internality).

A two-way analysis of variance was computed with outcome (success or failure) and ethnicity (Mainstream or Hispanic) as independent variables and the internality index as dependent variable. The results of the analysis showed that the main effect for outcome was significant [$F(1,178) = 29.9$, $p < .01$] whereas the main effect for ethnicity and the interaction between outcome and ethnicity did not reach significance. As shown in Table 1, both Mainstream and Hispanic respondents took more responsibility for their success than for their failure. This pattern suggests then that the self serving bias is operating among our respondents at least in terms of internality.

A MANOVA was done with ethnicity and outcome as the independent variables and internality, stability and controllability as the dependent variables. Again there was no significant difference for ethnicity and there was a highly significant difference by outcome ($F = 19.5, p < .001$). Univariate tests did not change this pattern of findings. The corresponding means and standard deviations are shown in Table 1.

Next, the rating of each item was examined by a two-way MANOVA with outcome and ethnicity as independent variables. The main effect of outcome reached significance ($F = 13.3, p < .01$), while neither ethnicity nor the interaction reached a significant multivariate effect.

In order to further examine the multivariate effect of outcome on the eight dependent variables, univariate F-tests were performed. Table 2 shows how both Hispanic and Mainstream Navy recruits produced significantly different attribution ratings depending on the outcome of their behavior (success or failure) attributable to ability, immediate and typical effort, task difficulty, mood, and usual help or neglect by others. In examining the attribution means (Table 3), both cultural groups showed high attribution ratings for success on ability and on both immediate and typical effort, and relatively high ratings on immediate effort for failure. Although in this analysis the F-ratio for the ethnicity main effect was almost significant, this seems to be a reflection of the number of dependent variables. We are inclined to ignore this result.

Discussion

The result of this study supports the pattern of findings in the large project concerning Navy recruits, of which this is only a part. The pattern is that the Hispanic and Mainstream recruits do not differ very much except in details. In this study, both ethnic groups showed a self-serving bias; i.e., they took more responsibility for their successes than for their failures.

They also showed the type of attribution pattern that those who are high on need for achievement tend to show (Weiner, Frieze, Kukla, Reed, Rest & Rosenbaum, 1972). That is, our respondents attributed their failure to a lack of effort rather than a lack of ability.

However, one caution seems in order. The questions of the present study were asked in a very abstract and relatively context-free manner, therefore the respondents' answers are expected to reflect their abstract and contextless beliefs about themselves that they would attribute in a certain manner when they "succeed" or "fail". The pattern of attribution ratings may differ depending on the situations in which the outcomes are experienced. Another possible factor that affects attribution is the extent to which people are involved in the task performance (e.g., Miller, 1976).

Another rival hypothesis is that both Hispanic and Mainstream recruits are presenting themselves in the best light (see Bradley, 1978; Miller, 1978; Weary, 1979, for discussion of self-presentational bias in attribution). To put it differently, the reactivity of questions may explain the present result. However, this possibility seems weak because of the convergence of the present finding with other findings about the same population.

Reference Note

1. Hui, C. H., Triandis, H. C., & Chang, B. H. Locus of control among Mainstream and Hispanic Navy recruits: A methodological and substantive study. (Technical Report ONR-9). Urbana, Illinois: Department of Psychology, University of Illinois, March, 1982.

- Bradley, G. W. Self-serving biases in the attribution processes: A re-examination of the fact or fiction question. Journal of Personality and Social Psychology, 1978, 36, 56-71.
- Fry, P. S., & Ghosh, R. Attributions of success and failure: Comparison of cultural differences between Asian and Caucasian children. Journal of Cross-Cultural Psychology, 1980, 11, 343-363.
- Miller, D. T. Ego involvement and attributions for success and failure. Journal of Personality and Social Psychology, 1976, 34, 901-906.
- Miller, D. T. What constitutes a self-serving attributional bias? A reply to Bradley. Journal of Personality and Social Psychology, 1978, 36, 1221-1223.
- Miller, D. T., & Ross, M. Self-serving biases in the attribution of causality: Fact or fiction? Psychological Bulletin, 1975, 82, 213-225.
- Tetlock, P. E., & Levi, A. Attribution bias: On the inconclusiveness of the cognition--motivation debate. Journal of Experimental Psychology, 1982, 18, 68-88.
- Triandis, H. C. The analysis of subjective culture. New York: Wiley, 1972.
- Weary, G. Self-serving attributional biases: Perceptual or response distortions? Journal of Personality and Social Psychology, 1979, 37, 1418-1420.
- Weiner, B. A theory of motivation for some classroom experiences. Journal of Educational Psychology, 1979, 71, 3-25.
- Weiner, B., & Kukla, B. An attributional analysis of achievement motivation. Journal of Personality and Social Psychology, 1970, 15, 1-20.
- Weiner, B., Frieze, I., Kukla, A., Reed, L., Rest, S., & Rosenbaum, R. M. Perceiving the causes of success and failure. In E. E. Jones, D. E. Kanouse, H. H. Kelley, R. E. Nisbett, S. Valins, & B. Weiner (Eds.), Attribution: Perceiving the causes of behavior. Morristown, NJ: General Learning Press, 1972.
- Zuckerman, M. Attribution of success and failure revisited, or: The motivational bias is alive and well in attributional theory. Journal of Personality, 1979, 47, 245-287.

Table 1

Means and Standard Deviations of Attributions by Ethnic Group and by Outcome

Ethnic Group	<u>Internality</u>		<u>Stability</u>		<u>Controllability</u>	
	Failure	Success	Failure	Success	Failure	Success
Hispanics (N=41)	.6(5.6)	5.8(6.7)	-1.2(4.7)	2.0(4.5)	0.0(4.7)	1.4(5.4)
Mainstream (N=49)	.9(4.7)	4.9(5.3)	-1.0(5.2)	2.5(3.2)	-.2(5.0)	2.3(4.3)

Note: The larger the number the more the attribution reflects the label heading the column.

Table 2

Results of F-test for each Possible Attribution

Hypothesis	Error		
	MS	MS	F
Ability	144.0	2.7	53.31**
Immediate Effort	28.0	2.9	9.57**
Typical Effort	271.3	3.4	79.93**
Task Difficulty	28.0	2.9	9.57**
Luck	.1	3.3	.02
Mood	16.2	3.0	5.36*
Unusual Help or Neglect by Others	5.3	3.2	1.65
Usual Help or Neglect by Others	32.1	2.8	11.41**

* $p < .05$ ** $p < .01$ Note: all $df = 1.176$

Table 3

Means and Standard Deviations of Attribution Ratings

Attributional Referents	<u>Mainstream</u>		<u>Hispanic</u>	
	Failure	Success	Failure	Success
Ability	4.0 (1.6)	5.8 (1.4)	3.5 (1.9)	5.3 (1.7)
Immediate effort	4.5 (2.0)	5.8 (1.4)	3.9 (2.1)	5.8 (1.6)
Typical effort	3.2 (2.1)	5.2 (1.6)	3.0 (2.2)	6.0 (1.4)
Task difficulty	4.1 (1.8)	4.4 (1.5)	3.5 (1.8)	4.8 (1.8)
Luck	3.2 (1.7)	3.0 (1.7)	3.0 (1.9)	3.3 (2.0)
Mood	4.1 (1.5)	4.4 (1.6)	3.8 (2.0)	4.8 (1.8)
Unusual help or neglect by others	4.0 (1.8)	4.4 (1.6)	3.8 (1.8)	4.0 (2.0)
Usual help or neglect by others	3.6 (1.8)	4.6 (1.3)	3.2 (1.6)	3.9 (1.9)

DISTRIBUTION LIST

List 1 (Mandatory)

(12 copies)

Defense Technical Information Center
ATTN: DTIC DDA-2
Selection and Preliminary Cataloging Sec.
Cameron Station
Alexandria, VA 22314

Library of Congress
Science and Technology Division
Washington, DC 20540

Office of Naval Research
Code 4420E (3 copies)
800 N. Quincy St.
Arlington, VA 22217

Naval Research Laboratory
Code 2627 (6 copies)
Washington, DC 20375

Office of Naval Research
Director, Technology Programs
Code 200
800 N. Quincy St.
Arlington, VA 22217

Office of Naval Research
Code 440
800 N. Quincy St.
Arlington, VA 22217

Office of Naval Research
Code 442PT
800 N. Quincy St.
Arlington, VA 22217

Office of Naval Research
Code 442EP
800 N. Quincy St.
Arlington, VA 22217

List 2 ONR Field

ONR Western Regional Office
1030 E. Green St.
Pasadena, CA 91106

Psychologist
ONR Western Regional Office
1030 E. Green St.
Pasadena, CA 91106

ONR Regional Office
536 S. Clark St.
Chicago, IL 60605

Psychologist
ONR Regional Office
536 S. Clark St.
Chicago, IL 60605

Psychologist
ONR Eastern Regional Office
495 Summer St.
Boston, MA 02210

ONR Eastern/Central Regional Office
495 Summer St.
Boston, MA 02210

ONR MISC.

LCOL Amilcar Vasquez
Marine Corps
Dept. of the Navy
Assistant of DASN(E0)
The Pentagon, Room 5D824
Washington, DC 20350

CAPT. A. T. Eyler
OP-150
Department of the Navy
Washington Navy Yard, Bldg. #212
Washington, DC 20370

CDR Ken Johnson
Department of the Navy
Navy Recruiting Command
Room 217
Ballston Tower #3, Arlington, VA 22211

Dr. Al Lau
Navy Personnel Research and
Development Center
San Diego, CA 92152

List 3 OPNAV

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Head, Research, Development, and
Studies Branch (Op-115)
1812 Arlington Annex
Washington, DC 20350

Director
Civilian Personnel Division (OP-14)
Department of the Navy
1803 Arlington Annex
Washington, DC 20350

Deputy Chief of Naval Operations
(Manpower, Personnel, and Training)
Director, Human Resource Management
Plans and Policy Branch (Op-150)
Department of the Navy
Washington, DC 20350

Chief of Naval Operations
Head, Manpower, Personnel, Training
and Reserves Team (Op-964D)
The Pentagon, 4A478
Washington, DC 20350

Chief of Naval Operations
Assistant, Personnel Logistics
Planning (Op-987H)
The Pentagon, 5D772
Washington, DC 20350

List 4 (NAVMAT)

Program Administrator for Manpower,
Personnel, and Training
MAT-0722 (A. Rubenstein)
800 N. Quincy St.
Arlington, VA 22217

Naval Material Command
Management Training Center
NAVMAT 09M32
Jefferson Plaza, Bldg. #2, Rm. 150
1421 Jefferson Davis Highway
Arlington, VA 20360

Naval Material Command
MAT-00K
(J. W. Tweeddale)
OASN(SNL)
Room 236
Crystal Plaza #5

Naval Material Command
MAT-00KB
OASN(SNL)
Room 236
Crystal Plaza #5
Washington, DC 20360

Naval Material Command
MAT-03
(J. E. Colvard)
Room 236
Crystal Plaza #5
Washington, DC 20360

List 4 (NPRDC)

Commanding Officer (3 copies)
Naval Personnel R&D Center
San Diego, CA 92152

Naval Personnel R&D Center
Dr. Robert Penn
San Diego, CA 92152

Dr. Ed Aiken
Naval Personnel R&D Center
San Diego, CA 92152

Navy Personnel R&D Center
Washington Liaison Office
Building 200, 2N
Washington Navy Yard
Washington, DC 20374

List 5 BUMED

Commanding Officer
Naval Health Research Center
San Diego, CA 92152

CDR William S. Maynard
Psychology Department
Naval Regional Medical Center
San Diego, CA 92134

Naval Submarine Medical
Research Laboratory
Naval Submarine Base
New London, Box 900
Groton, CT 06349

Director, Medical Service Corps
Bureau of Medicine and Surgery
Code 23
Department of the Navy
Washington, DC 20372

Naval Aerospace Medical Research Lab
Naval Air Station
Pensacola, FL 32508

Program Manager for Human
Performance (Code 44)
Naval Medical R&D Command
National Naval Medical Center
Bethesda, MD 20014

Navy Medical R&D Command
ATTN: Code 44
National Naval Medical Center
Bethesda, MD 20014

List 6

Naval Academy & Naval Postgrad. School

Naval Postgraduate School
ATTN: Dr. Richard S. Elster
(Code 012)
Department of Administrative Sciences
Monterey, CA 93940

Naval Postgraduate School
ATTN: Prof. John Senger
Operations Research & Administrative
Science
Monterey, CA 93940

Superintendent
Naval Postgraduate School
Code 1424
Monterey, CA 93940

Naval Postgraduate School
ATTN: Dr. James Arima
Code 54-Aa
Monterey, CA 93940

Naval Postgraduate School
ATTN: Dr. Richard A. McGonigal
Code 54
Monterey, CA 93940

U.S. Naval Academy
ATTN: CDR J. M. McGrath
Department of Leadership & Law
Annapolis, MD 21402

Prof. Carson K. Eoyang
Naval Postgraduate School
Code 54EG
Department of Admin. Sciences
Monterey, CA 93940

Superintendent
ATTN: Director of Research
Naval Academy, U.S.
Annapolis, MD 21402

List 8 Navy Miscellaneous

(2 copies)

Naval Military Personnel Command
HRM Department (NMPC-6)
Washington, DC 20350

Naval Training Analysis
and Evaluation Group
Orlando, FL 32813

Commanding Officer
ATTN: TIC, Bldg. 2068
Naval Training Equipment Center
Orlando, FL 32813

Chief of Naval Education
and Training (N-5)
Director, Research Development,
Test and Evaluation
Naval Air Station
Pensacola, FL 32508

Chief of Naval Technical Training
ATTN: Dr. Norman Kerr, Code 017
NAS Memphis (75)
Millington, TN 38054

Navy Recruiting Command
Head, Research and Analysis Branch
Code 434, Room 8001
801 North Randolph St.
Arlington, VA 22203

Commanding Officer
USS Carl Vinson (CVN-70)
Newport News Shipbuilding &
Drydock Company
Newport News, VA 23607

Naval Weapons Center
Code 094 (C. Erickson)
China Lake, CA 93555

Jesse Orlansky
Institute for Defense Analyses
1801 N. Beauregard St.
Alexandria, VA 22311

List 9 USMC

Headquarters, U.S. Marine Corps
Code MPI-20
Washington, DC 20380

Headquarters, U.S. Marine Corps
ATTN: Dr. A. L. Slafkosky
Code RD-1
Washington, DC 20380

Education Advisor
Education Center (E031)
MCDEC
Quantico, VA 22134

Commanding Officer
Education Center (E031)
MCDEC
Quantico, VA 22134

Commanding Officer
U.S. Marine Corps
Command and Staff College
Quantico, VA 22134

List 10 DARPA

(3 copies)

Defense Advanced Research Proj. Agency
Director, Cybernetics Tech. Office
1400 Wilson Blvd., Room 625
Arlington, VA 22209

Mr. Michael A. Daniels
Int'l Public Policy Research Corp.
6845 Elm St., Suite 212
McLean, VA 22101

Dr. A. F. K. Organski
Center for Political Studies
Institute for Social Research
University of Michigan
Ann Arbor, MI 48106

List 11 Other Federal Government

Dr. Douglas Hunter
Defense Intelligence School
Washington, DC 20374

Dr. Brian Usilaner
GAO
Washington, DC 20548

Nat'l Institute of Education
ATTN: Dr. Fritz Mulhauser
EOLC/SMO
1200 19th St., N.W.
Washington, DC 20208

Nat'l Institute of Mental Health
Div. of Extramural Research Programs
5600 Fishers Lane
Rockville, MD 20852

Nat'l Institute of Mental Health
Minority Group Mental Health Programs
Room 7 - 102
5600 Fishers Lane
Rockville, MD 20852

Office of Personnel Management
Office of Planning and Evaluation
Research Management Div.
1900 E Street, N.W.
Washington, DC 20415

Office of Personnel Management
ATTN: Ms. Carolyn Burstein
1900 E Street, NW.
Washington, DC 20415

Office of Personnel Management
ATTN: Mr. Jeff Kane
Personnel R&D Center
1900 E Street, N.W.
Washington, DC 20415

Chief, Psychological Research Branch
ATTN: Mr. Richard Lanterman
U.S. Coast Guard (G-P-1/2/TP42)
Washington, DC 20593

Social and Developmental Psychology
Program
National Science Foundation
Washington, DC 20550

List 12 Army

Headquarters, FORSCOM
ATTN: AFPR-HR
Ft. McPherson, GA 30330

Army Research Institute
Field Unit - Leavenworth
P.O. Box 3122
Fort Leavenworth, KS 66027

Technical Director
Army Research Institute
5001 Eisenhower Avenue
Alexandria, VA 22333

Director
Systems Research Laboratory
5001 Eisenhower Ave.
Alexandria, VA 22333

Director
Army Research Institute
Training Research Laboratory
5001 Eisenhower Ave.
Alexandria, VA 22333

Dr. T. O. Jacobs
Code PERI-IM
Army Research Institute
5001 Eisenhower Avenue
Alexandria, VA 22333

Col. Howard Prince, Head
Department of Behavior
Science and Leadership
U.S. Military Academy,
New York 10996

List 13 Air Force

Air University Library
LSE 76-443
Maxwell AFB, AL 36112

Col. John W. Williams, Jr.
Head, Dept. of Behavioral Science
and Leadership
U.S. Air Force Academy, CO 80840

Maj. Robert Gregory
USAFA/DFBL
U.S. Air Force Academy, CO 80840

AFOER/NL (Dr. Fregly)
Building 410
Bolling AFB
Washington, DC 20332

Dept. of the Air Force
Maj. Bossart
HQUSAF/MPXHL
The Pentagon
Washington, DC 20330

Technical Director
AFHRL/MO(T)
Brooks AFB
San Antonio, TX 78235

AFMPC/MPCYPR
Randolph AFB, TX 78150

List 15 Current Contractors

Dr. Richard D. Arvey
University of Houston
Department of Psychology
Houston, TX 77004

Dr. Stuart W. Cook
Institute of Behavioral Science #6
University of Colorado
Box 482
Boulder, CO 80309

Dr. L. L. Cummings
Kellogg Graduate School of Management
Northwestern University
Nathaniel Leverone Hall
Evanston, IL 60201

Dr. Henry Emurian
The Johns Hopkins University
School of Medicine
Department of Psychiatry &
Behavioral Science
Baltimore, MD 21205

Bruce J. Bueno De Mesquita
University of Rochester
Dept. of Political Science
Rochester, NY 14627

Dr. John P. French, Jr.
University of Michigan
Institute for Social Research
P.O. Box 1248
Ann Arbor, MI 48106

Dr. Paul S. Goodman
Graduate School of Industrial Admin.
Carnegie-Mellon University
Pittsburgh, PA 15213

Dr. J. Richard Hackman
School of Organization & Management
Box 1A
Yale University
New Haven, CT 06520

Dr. Lawrence R. James
School of Psychology
Georgia Institute of Technology
Atlanta, GA 30332

Allan P. Jones
University of Houston
4800 Calhoun
Houston, TX 77004

List 15 Current Contractors

Dr. Frank J. Landy
Department of Psychology
The Pennsylvania State University
417 Bruce V. Moore Bldg.
University Park, PA 16802

Dr. Bibb Latané
Department of Psychology
The Ohio State University
404B West 17th St.
Columbus, OH 43210

Dr. Edward E. Lawler
University of Southern California
Graduate School of Business Admin.
Los Angeles, CA 90007

Dr. Edwin A. Locke
College of Business & Management
University of Maryland
College Park, MD 20742

Dr. Fred Luthans
Regents Professor of Management
University of Nebraska - Lincoln
Lincoln, NE 68588

Dr. R. R. Mackie
Human Factors Research
A Division of Canyon Research
5775 Dawson St.
Goleta, CA 93017

Dr. William H. Mobley
College of Business Admin.
Texas A&M University
College Station, TX 77843

Dr. Thomas M. Ostrom
Dept. of Psychology
The Ohio State University
116E Stadium
404C West 17th Avenue
Columbus, OH 43210

Dr. William G. Ouchi
Graduate School of Management
University of California, Los Angeles
Los Angeles, California 90024

Dr. Irwin G. Sarason
Dept. of Psychology, NI-25
University of Washington
Seattle, WA 98195

Dr. Benjamin Schneider
Department of Psychology
Michigan State University
East Lansing, MI 48824

Dr. Edgar H. Schein
Sloan School of Management
Massachusetts Institute of Technology
Cambridge, MA 02139

H. Ned Seelye
International Resource Development, Inc.
P. O. Box 721
LaGrange, IL 60525

Dr. H. Wallace Sinaiko
Program Director, Manpower Research
and Advisory Services
Smithsonian Institution
801 N. Pitt St., Suite 120
Alexandria, VA 22314

Dr. Richard M. Steers
Graduate School of Management
University of Oregon
Eugene, OR 97403

Dr. Siegfried Streufert
Dept. of Behavioral Science
The Pennsylvania State University
Milton S. Hershey Medical Center
Hershey, PA 17033

Dr. James R. Terborg
University of Oregon, West Campus
Dept. of Management
Eugene, OR 97403

Dr. Howard M. Weiss
Dept. of Psychological Sciences
Purdue University
West Lafayette, IN 47907

Dr. Philip G. Zimbardo
Dept. of Psychology
Stanford University
Stanford, CA 94305